PMM Express

The Application of the State's Project Management Methodology to Non-Complex Projects

Department of Information Technology
Enterprise Portfolio Support
May 2003

Table of Contents

Overview

Project Management Methodology (PMM) Express was developed as a guide to assist in the management of smaller, less complex projects within the Department of Information Technology. *PMM Express* is a customized version of the State of Michigan Project Management Methodology (PMM) and schedule templates (in both Niku Workbench and MS Project). For more information on the State's PM Methodology, visit the Enterprise Portfolio Support website at www.michigan.gov/projectmanagement.

The PMM was streamlined to handle the effort/complexity level of 30 to 90 day projects. The applicable PMM templates include:

- **Project Charter**
- **Project Plan**
- **Project Status Report**
- **Project Issue Document**
- **Project Change Control Request, and**
- **Post Implementation Evaluation Report (PIER)**

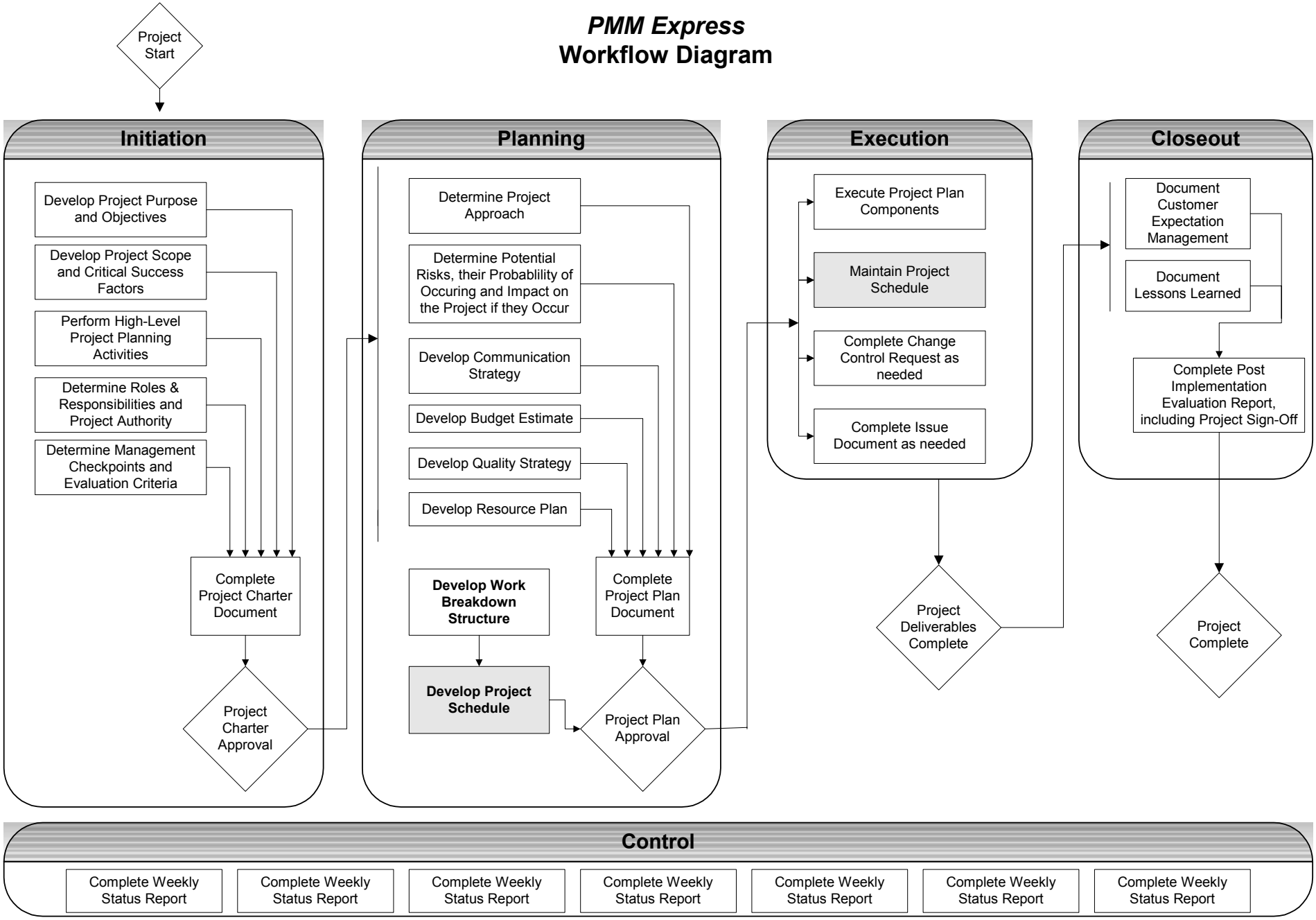
A standardized project schedule template is incorporated into *PMM Express* in both Niku Workbench and MS Project formats. The project schedule template contains the following major phases:

- **Initiation** (charter development)
- **Planning** (project plan development)
- **Execution** (executing the project plan, maintaining the project schedule, managing project scope changes, and managing project issues)
- **Control** (weekly status report preparation and status meetings)
- **Closeout** (validating customer expectations, documenting best practices and lessons learned, and official project sign-off)

For soft copies of *PMM Express* including document and scheduling templates, point your web browser to www.michigan.gov/projectmanagement, click on "Project Management Methodology", then click on *PMM Express* or send an email request to DIT-EPS@michigan.gov.

The Workflow Diagram on the following page graphically depicts the use of *PMM Express*.

PMM Express
Workflow Diagram



Project Management Methodology

The State's Project Management Methodology (PMM) was designed for projects of all sizes and complexity, but is geared to large-scale efforts. *PMM Express* has appropriately sized the PMM for 30 to 90 day projects.

The applicable *PMM Express* templates, their purpose and customization from the PMM is detailed below:

- **PROJECT CHARTER**
  - **Purpose:** The Project Charter is the formal document authorizing resources to be expended for a project. It also details the budget, scope, defines major roles and responsibilities, and high-level schedule of the project.
  - **Customization of PMM:** Incorporating elements from the Feasibility, Concept, and Project Scope templates
- **PROJECT PLAN**
  - **Purpose:** The Project Plan dictates how the project will be managed, including the project approach, and how risk, communications, budgeting, quality and resources will be managed on the project.
  - **Customization of PMM:** Transforming the set of eleven project planning templates into a single all-encompassing template
- **PROJECT STATUS REPORT**
  - **Purpose:** The Project Status Report is the mechanism for the project manager to communicate progress and risks/issues to project stakeholders. The Project Status Report is generally the main document used at project status meetings.
  - **Customization of PMM:** None
- **PROJECT ISSUE DOCUMENT**
  - **Purpose:** Used to formally document major project related issues. Smaller project related issues are documented on the Project Status Report only.
  - **Customization of PMM:** None
- **PROJECT CHANGE CONTROL REQUEST**
  - **Purpose:** Used to formally request approval for significant changes to the project scope. Scope changes that impact the project budget, schedule, or quality must have an approved Change Control Request prior to expending resources on tasks outside the approved project scope.
  - **Customization of PMM:** None
- **POST IMPLEMENTATION EVALUATION REPORT**
  - **Purpose:** Used to receive formal project sign-off and to document project execution, best practices and/or lessons learned.
  - **Customization of PMM:** Summarized to include Customer Expectations Management, Lessons Learned, and Project Sign-off

Following is a copy of these templates, including examples of the Project Charter and Project Plan. These examples are meant to give an idea of level of detail needed for 30 to 90 day projects.

Michigan Department of Information Technology

Project Charter

A. General Information

Information to be provided in this section gives a specific name to the project as well as pertinent information about the personnel involved.

Project Name:		**Preparation Date:**	
Sponsoring Bureau:		**Modification Date:**	
Prepared by:		**Authorized by:**	

B. Project Purpose

This section communicates the purpose of the project, including the business problem to be solved.

C. Project Objective

This section defines the objectives of the project as they relate to the goals and objectives of the organization.

The project will support the following organization strategic goals. For each goal, project objectives are identified.

Agency Goals	Project Objectives

D. Project Scope

The level of detail in this section must be sufficient to allow for detailed development of the Project Plan. The reader is cautioned that scope creep (adding work without corresponding updates to cost, schedule, and quality) may render original plans unachievable. Therefore, initial clarification of scope, and adherence to the plan throughout the project, are of the utmost importance. Describe any applicable assumptions and/or constraints that may affect the project.

Project Results. *State what will be created in terms of deliverables to satisfy the purpose of the project, as described in Section B.*

Content of the Project. *Define what work is to be done.*

Exclusions. *Define what work is not to be done, that otherwise might be assumed to be part of this project.*

Key Stakeholders. *List the organizations/persons directly affected by the project and the resulting project deliverables.*

Assumptions. *List major assumptions pertaining to this project that may impact scope.*

Constraints. *List all known constraints pertaining to this project that may impact scope.*

E. Project Critical Success Factors

Describe what will be the determining factors that are needed to ensure project success.

F. Initial High-Level Project Planning

Document project high-level anticipated estimates.

Estimated Resource Requirements: *Staff, consultant, equipment, and other resource categories needed for project completion.*

Estimated Project Cost: *Staff costs, consultant costs, equipment costs, and other cost categories needed for project completion.*

Estimated Benefits: *Outline the anticipated benefits as a result of performing this project.*

Estimated Schedule Dates:
Anticipated Start Date:
Target Completion Date:

G. Project Authority

This section describes the authority of the individual or organization initiating the project, limitations or initial checkpoint of the authorization, management oversight over the project, and the authority of the Project Manager. This project charter defines two management structures—internal and external—to ensure change and issues affecting project completion are properly controlled.

- **Authorization**

This section ensures that the project initiator has the authority to commit the appropriate resources within the organization.

This Project Charter has been initiated by Initiating Organization and authorizes the expenditure of Organization resources to complete a first checkpoint for the Project.

- **Project Manager**

This section explicitly names the project manager and may define his or her role and responsibility over the project.

Name:

Organization:

- **Oversight (Steering) Committee**

This section describes agency management control over the project. Within the project, internal control should be established to control the day-to-day activities of the project. The project manager should manage internal control. External oversight should be established to ensure that the organization's resources are applied to meet the project and organization's objectives.

H. Roles and Responsibilities

This section discusses the overall structure of the project organization and its roles and responsibilities throughout the project phases.

- **Project Organization Overview**

This section describes key organizations or individuals supporting the project not directly under the authority of the project manager.

Major Milestones	Functional Roles								

Legend:

E = responsible for execution (may be shared) **A = final approval for authority**
C = must be consulted **I = must be informed**

I. Management Checkpoints

This section describes key management checkpoints established by the initiating agency.

Checkpoint	Evaluation Criteria

J. Signatures

The signatures of the people below relay an understanding in the purpose and content of this document by those signing it. By signing this document you agree to this as the formal Charter statement to begin work on the project described within, and commitment of the necessary resources.

Name/Title	Signature	Date

Michigan Department of Information Technology

Project Charter

A. General Information

Information to be provided in this section gives a specific name to the project as well as pertinent information about the personnel involved.

Project Name:	IAI PM Framework Development	**Preparation Date:**	***4/14/2003***
Sponsoring Bureau:	Agency Services	**Modification Date:**	
Prepared by:	Dan Buonodono	**Authorized by:**	Dawn Brennan

B. Project Purpose

This section communicates the purpose of the project, including the business problem to be solved.

To develop a consolidated set of project management methods for the Integrated Alignment Initiative effort that is scaled to 30/60/90 day (small scale) projects.

The agreement of this charter will signify that the IAI PM Framework Development initiative will be a validated project and will allow resource allocations to perform this project.

C. Project Objective

This section defines the objectives of the project as they relate to the goals and objectives of the organization.

The Project will support the following organization strategic goals. For each goal, project objectives are identified.

Agency Goals	Project Objectives
Improving Citizen Access and Participation	The ability to deliver accurate, timely IT-based systems will ensure state-of-the-art access to government services and public information.
Supporting Agency Business Processes	The ability to consistently develop plans to implement IT initiatives will ensure that successful, cost effective efforts are delivered.
Governing Enterprise Information Technology	To manage and deliver better products utilizing consistent, proven project management processes throughout DIT.
Optimizing IT Resources	More consistent utilization of state and vendor resources through planning, reporting and training.

D. Project Scope

The level of detail in this section must be sufficient to allow for detailed development of the Project Plan. The reader is cautioned that scope creep (adding work without corresponding updates to cost, schedule, and quality) may render original plans unachievable. Therefore, initial clarification of scope, and adherence to the plan throughout the project, are of the utmost importance. Describe any applicable assumptions and/or constraints that may affect the project.

Project Results. *A Project Management Framework package that can be used to facilitate the management of small 30/60/90 day projects.*

Content of the Project.
Create a binder containing:
1. An overview section, including a Project Workflow Diagram

2. A consolidated subset of the State's Project Management Methodology (PMM) to include:
- Project Charter Document
- Consolidated Project Plan Document
- Project Status Report
- Project Issue Document
- Project Change Control Request
- Shortened Post Implementation Evaluation Report

2. A Schedule Template suitable for small projects, in both Niku Workbench and MS Project formats

3. A Schedule Guidelines Section containing excepts from the State's PMM, summarized for small projects

4. Training on the use of the IAI PM Framework

Exclusions. *Define what work is not to be done, that otherwise might be assumed to be part of this project.*
This Project will not include day-to-day project management of the IAI initiative.

This project will not include scheduling of the IAI projects.

Key Stakeholders. *List the organizations directly affected by the project and the resulting project deliverables.*
IAI Core Team, IAI Project Managers

Assumptions. *Sponsorship and project-wide buy-in regarding the strategic importance and priority of scaling the PM Methodology for small projects.*

Constraints: *Funding to us consultant resources. Resources to effect tasking and to complete the deliverables.*

E. Project Critical Success Factors

Describe what will be the determining factors that are needed to ensure project success.

1. *Project Manager allocated at 50 percent for the entire duration of the project*
2. *Project Sponsor designating this project as high-priority*
3. *Project Managers attend PM Framework Training Session*

F. Initial High-Level Project Planning

Document project high-level anticipated estimates.

Estimated Resource Requirements: *Staff, consultant, equipment, and other resource categories needed for project completion.*
One half-time project manager,
one project team assistant at 25 percent allocation,
availability of a PC with a CD Writer for e-file dissemination,

Estimated Project Cost: *Staff costs, consultant costs, equipment costs, and other cost categories needed for project completion.*
$3900

Estimated Benefits: *Outline the anticipated benefits as a result of performing this project.*
To manage and deliver better products utilizing consistent, proven project management processes throughout DIT,
Customer Service improvement, due to more successful products being delivered. Cost effective, timely, and what the customer wants/needs.

Estimated Schedule Dates:
Anticipated Start Date: *4/15/03*

Target Completion Date: *5/15/03*

G. Project Authority

This section describes the authority of the individual or organization initiating the project, limitations or initial checkpoint of the authorization, management oversight over the project, and the authority of the Project Manager. This project charter defines two management structures—internal and external—to ensure change and issues affecting project completion are properly controlled.

- **Authorization**

This section ensures that the project initiator has the authority to commit the appropriate resources within the organization.

This Project Charter has been initiated by Initiating Organization and authorizes the expenditure of Organization resources to complete a first checkpoint for the Project.

- **Project Manager**

This section explicitly names the project manager and may define his or her role and responsibility over the project.

Name: Dan Buonodono

Organization: Enterprise Portfolio Support

- **Oversight (Steering) Committee**

This section describes agency management control over the project. Within the project, internal control should be established to control the day-to-day activities of the project. The project manager should manage internal control. External oversight should be established to ensure that the organization's resources are applied to meet the project and organization's objectives.

IAI Core Team, including Dawn Brennan, Pat Hale, Carol Steffanni, George Boersma, Lee Moore, Mike Binkley, Ken Theis

H. Roles and Responsibilities

This section discusses the overall structure of the project organization and its roles and responsibilities throughout the project phases.

- **Project Organization Overview**

This section describes key organizations or individuals supporting the project not directly under the authority of the project manager. A responsibility matrix may facilitate the task of organizing and assigning resource responsibility.

Major Milestones	Functional Roles								
	PM	Sponsor	Team	Oversight Committee					
Initial Strategy	E	A	I	I					
PMM Templates Developed	E	A	I						
Project Schedule Templates Developed	E	A	I						
Scheduling Guidelines Developed	E	A	I						
PM Framework Package Completed	E	C		A					
PM Framework Training Completed	E	A							

Legend:

E = responsible for execution (may be shared) **A = final approval for authority**
C = must be consulted **I = must be informed**

I. Management Checkpoints

This section describes key management checkpoints established by the initiating agency.

Checkpoint	Evaluation Criteria
Initial PM Framework Strategizing	Approval by Sponsor
PM Framework Package Completion	Contains all Elements described in project Scope
PM Training Delivery	Positive IAI individual project manager feedback

J. Signatures

The signatures of the people below relay an understanding in the purpose and content of this document by those signing it. By signing this document you agree to this as the formal Charter statement to begin work on the project described within, and commitment of the necessary resources.

Name/Title	Signature	Date
Dawn Brennan, Project Sponsor		
Dan Buonodono, Project Manager		

Michigan Department of Information Technology

Project Plan

A. General Information

Information in the project summary areas that was drafted during the project concept phase and should be included here. Information includes the project name, original estimates, plan revision numbers, points of contact, etc.

Project Name: _____ **Preparation Date:** _____

Controlling Bureau: _____ **Modification Date:** _____

Prepared by: _____ **Authorized by:** _____

Agency Points of Contact

This should be the list of individuals that will be involved with the project during the Execution Phase.

Position	Name	Phone	E-mail
Project Manager			
Senior Management Sponsor			
Senior Technical Sponsor			
Procurement Contact			
Customers:			
Other Stakeholders:			

B. Project Approach

Describe the strategy to deliver the project. For example, it may describe a phased strategy, contracting approach, reference to implementation, etc. Subsections may be created to present the strategy.

C. Additional Project Requirements

Provides a detailed listing of project requirements, with references, to the Scope Statement, the Work Breakdown Structure, the Project Schedule, and specifications. This would also include any mechanisms used to assist in the management control over the project. Escalation procedures, cyclical management reporting, and project status reports should also be included.

#	Requirement	SOW Reference	Task Reference	Specification Reference	Date Completed	Comments/ Clarification
1.						
2.						
3.						
4.						
5.						

D. Resource Planning

After establishing the human resources required for the project, develop a staffing plan that shows the personnel (both internal and external) and their estimated effort hours that will be required on the project on a weekly basis.

Staffing Names	Week1	Week2	Week3	Week4	Week5	Week6	Week7	Week8	Week9

E. Budget Planning

List the budget estimate, by task, that it is estimated to complete this project. Include Personnel, contractor, equipment, and other associated costs required to complete all project deliverables.

Project Task	Labor Hour	Labor Cost	Material Cost	Travel Cost	Other Cost	Total per Task
Other:						
Sub-Totals:		0	0	0	0	
Risk (Contingency)						
TOTAL (scheduled)	0	0	0	0	0	$0.00

F. Communication Planning

List the different project stakeholder categories (Project Sponsor, Information Officer, Customer, Team Member). Describe how they will receive project information (email, project status meetings, sponsor meetings, etc.) and give the frequency in which they will receive this information (daily, weekly, bi-weekly, etc.).

Target Audience		Target Message/ Agenda	Method	Frequency	Duration
Type	Name				

G. Quality Planning

Project / product quality is of paramount importance. This section should detail how quality is being addressed.

Deliverable Acceptance Criteria. *Describe Acceptance Criteria for deliverables as they are turned over to the customer.*

Applicable QA Activities. *Define applicable Quality Assurance activities for the project including test and acceptance processes and documentation.*

H. Risk Planning

Describe any potential risks that may impact the schedule, cost, or quality of the project or resulting project deliverables. For high impact / high probability risks, detailed mitigation plans should be provided (as an attachment, if necessary).

#	Risk Description	Impact	Prob	Weight	Owner	Mitigation Plans

I. Signatures

The signatures of the people below relay an understanding in the purpose and content of this document by those signing it. By signing this document you agree to this as the formal Project Plan.

Name/Title	Signature	Date

Michigan Department of Information Technology

Project Plan

A. General Information

Information in the project summary areas that was drafted during the project concept phase and should be included here. Information includes the project name, original estimates, plan revision numbers, points of contact, etc.

Project Name:	IAI PM Framework Development	**Preparation Date:**	04/14/2003
Controlling Bureau:	Agency Services	**Modification Date:**	
Prepared by:	Dan Buonodono	**Authorized by:**	Dawn Brennan

Agency Points of Contact

This should be the list of individuals that will be involved with the project during the Execution Phase.

Position	Name	Phone	E-mail
Project Manager	Dan Buonodono	517/335-5099	buonodonod@Michigan.gov
Senior Management Sponsor	Ken Theis	517/241-5145	Theisk2@Michigan.gov
Senior Technical Sponsor	N/A		
Procurement Contact	N/A		
Customers:	EPS Director, IAI Sponsors, IAI Project Managers		
Other Stakeholders:	DIT Director, EPS, Agency Services Management		

B. Project Approach

Describe the strategy to deliver the project. For example, it may describe a phased strategy, contracting approach, reference to implementation, etc. Subsections may be created to present the strategy.

Develop High Level Strategy, and get approval to move forward.

Develop Detailed Strategy, and get approval to move forward.

Develop PM Framework Package, and get concurrence on technique.

Share PM Framework Package with other PM Professionals and get their feedback

Pilot PM Framework on IAI project managers, and get their feedback

Incorporate PM Framework in PMM Improvement Effort.

C. Additional Project Requirements

Provides a detailed listing of project requirements, with references, to the Scope Statement, the Work Breakdown Structure, the Project Schedule, and specifications. This would also include any mechanisms used to assist in the management control over the project. Escalation procedures, cyclical management reporting, and project status reports should also be included.

#	Requirement	SOW Reference	Task Reference	Specification Reference	Date Completed	Comments/ Clarification
1.	Project Schedule				4/23/2003	
2.						
3.						
4.						
5.						

D. Resource Planning

After establishing the human resources required for the project, develop a staffing plan that shows the personnel (both internal and external) and their estimated effort hours that will be required on the project on a weekly basis.

Staffing Names	Week1	Week2	Week3	Week4	Week5	Week6	Week7	Week8	Week9
Dan Buonodono	20	20	10	10	5	5	10	10	5
Dawn Brennan	4	12	8	6	10	10	10	5	1
Margaret Smith	8	16	16	16	12	0	0	0	0
James Irwin	0	0	0	0	40	40	40	20	10

E. Budget Planning

List the budget estimate, by task, that it is estimated to complete this project. Include Personnel, contractor, equipment, and other associated costs required to complete all project deliverables.

Project Task	Labor Hour	Labor Cost	Material Cost	Travel Cost	Other Cost	Total per Task
Strategy Development	4	$75.00	$0.00	$0.00	$0.00	$300
PM Package Development	50	$75.00	$0.00	$0.00	$0.00	$3,750
Training	6	$75.00	$0.00	$0.00	$0.00	$450
	0	$0.00	$0.00	$0.00	$0.00	$0.00
	0	$0.00	$0.00	$0.00	$0.00	$0.00
	0	$0.00	$0.00	$0.00	$0.00	$0.00
	0	$0.00	$0.00	$0.00	$0.00	$0.00
Other:	0	$0.00	$0.00	$0.00	$0.00	$0.00
	0	$0.00	$0.00	$0.00	$0.00	$0.00
Sub-Totals:	60	$0.00	$0.00	$0.00	$0.00	$4,500
Risk (Contingency)	0	$0.00	$0.00	$0.00	$0.00	$0.00
TOTAL (scheduled)	60	$0.00	$0.00	$0.00	$0.00	$4,500

F. Communication Planning

List the different project stakeholder categories (Project Sponsor, Information Officer, Customer, Team Member). Describe how they will receive project information (email, project status meetings, sponsor meetings, etc.) and give the frequency in which they will receive this information (daily, weekly, bi-weekly, etc.).

Target Audience		Target Message/ Agenda	Method	Frequency	Duration
Type	**Name**				
Project Team	Dawn Brennan Dan Buonodono	* Project Plan Review * Project Plan Approval	Meeting	One-time	2/13/2003
Project Team	Dawn Brennan Dan Buonodono	* Project Updates * Issues/Problems * Schedule Updates	Meeting	Weekly	Monday 1:00 pm (2/17 through 7/3)
Project Team	Dawn Brennan Dan Buonodono	* Status Report	Email	Weekly	Monday 9:00 am
Focus Group	Te be determined	Project Updates	Email	Bi-weekly	Friday 1:00 pm
Leadership Team	Direct Reports to DIT Deputy Directors	* Project Plan Approval	Meeting	One-time	2/13/2003
Leadership Team	Direct Reports to DIT Deputy Directors	* Project Updates * Continued Support	Email	Bi-weekly	Friday 1:00 pm
All of DIT	All of DIT	* Project Updates * Schedule Updates	Website	Bi-weekly	Friday 1:00 pm Updates on TechTalk

G. Quality Planning

Project / product quality is of paramount importance. This section should detail how quality is being addressed.

Deliverable Acceptance Criteria. *Describe Acceptance Criteria for deliverables as they are turned over to the customer.*
- Completeness of PM Framework Package
- Neatness of PM Framework Package, including tabs, cover and side insert
- Completeness and value of training

Applicable QA Activities. *Define applicable Quality Assurance activities for the project including test and acceptance processes and documentation.*
- Template walkthroughs
- Document reviews
- Pilot process and templates and gather feedback

H. Risk Planning

Describe any potential risks that may impact the schedule, cost, or quality of the project or resulting project deliverables. For high impact / high probability risks, detailed mitigation plans should be provided (as an attachment, if necessary).

#	Risk Description	Impact	Prob	Weight	Owner	Mitigation Plans
1	Insufficient response from questionnaire target group	10	0.6	6	Dan Buonodono	Increase management communication. Show benefits of implementing PMM department wide. Map to existing DIT initiatives. Show what is in it for them and their area. Acknowledge and reward their input.
2	Questionnaire target group not willing to share information due to time constraints (not enough respondents)	10	0.7	7	Dan Buonodono	Increase communication to target group. Show benefits of implementing PMM department wide. Allow the target group to become part of the process. Acknowledge and reward their input.
3	Not enough information supplied by respondents	10	0.4	4	Dan Buonodono	Get steering committee involved throughout the entire project. Make sure that there are no surprises.
4	Insufficient attendance at focus group meeting	8	0.3	2.4	Dawn Brennan	Increase communication to potential focus group members. Show what is in it for them and their area. Acknowledge and reward their input.
5	Focus group attendees not knowledgeable enough in PMM	8	0.4	3.2	Dan Buonodono	Increase communication to focus group members regarding its purpose Acknowledge and reward their input
6	Project team does not agree to PMM next steps	8	0.3	2.4	Dawn Brennan	Keep project team informed during the life of the project. Get project team involved in developing these documents. Make sure that there are no surprises.

I. Signatures

The signatures of the people below relay an understanding in the purpose and content of this document by those signing it. By signing this document you agree to this as the formal Project Plan.

Name/Title	Signature	Date

Michigan Department of Information Technology

Project Status Report

A. General Information

Information to be provided in this section gives a specific name to the project as well as pertinent information about the personnel involved.

Project Name:		**Preparation Date:**	
Controlling Agency:		**Modification Date:**	
Prepared by:		**Authorized by:**	

Project is: ☐ **On Plan** ☐ **Ahead of Plan** ☐ **Behind Plan**

Reporting Period: **From:** **To:**

B. Current Activity Status

Attach any relevant Change Control Requests.

The description of activity should not span more than 2 to 3 lines. Activities should be linked to the project tasks list or Work Breakdown Structure.

C. Significant Accomplishments for Current Period

A summary of the significant accomplishments and project deliverables during the reporting period.

D. Planned Activities for Next Period

The description of activity should not span more than 2 to 3 lines. Activities should be linked to the project tasks list or Work Breakdown Structure.

E. Financial Status

Covers planned versus actual costs and budgets.

	Planned (to date)	Actual (to date)
Costs		
Schedule		
Staffing		
Estimate to Complete (ETC) Review		
Estimate at Completion (EAC Projection)		

F. Technical Status/Issues Log

Identify technical issues impacting the project. Attach any relevant Issues Documents to this status report.

Discusses any relevant technical issues at this point in the project.

Issues Log

Issue Name	Issue Description	Issue Assignee	Issue Status

G. Previous Action Items

Covers any open action items from previous status reports.

H. Last Risk Update/Status

Covers any risk status reports since the last status report.

Michigan Department of Information Technology

Issue Document

A. General Information

Information to be provided in this section gives a specific name to the project as well as pertinent information about the personnel involved.

Project Name: _____ **Preparation Date:** _____

Controlling Agency: _____ **Modification Date:** _____

Prepared by: _____ **Issue Number (From Issue Log):** _____

B. Issue Background

Issue Type (check one):

☐ **Request for Information** ☐ **System Problem**
☐ **Procedural Problem** ☐ **Other**

(Specify)

Date Resolution Needed: **Proposed Assignee:** **Attachments (if any):** **Reviewer:** **Reviewer Completion Date:** **Reviewer Comments:**	☐ **YES** ☐ **NO**

Issue Description:

Initial Recommendation:

Potential Impact (if not resolved):

Cost / Schedule Impact Analysis Required? ☐ **Yes** ☐ **No**

Estimate of Additional Effort:

Resources Required	Work Days/Costs

C. Recommendation

Final Recommendation and Comments:

Name/Title	Signature	Date

D. Management Action

Recommendation status (check one):

☐ **Accept** ☐ **Defer** ☐ **Need Additional Information** ☐ **Reject**

Assigned to: **Organization:**

Planned Completion Date:

E. Signatures

The signatures of the people below relay an understanding in the purpose and content of this document by those signing it.

Name/Title	Signature	Date

Michigan Department of Information Technology

Change Control Request

A. General Information

Information to be provided in this section gives a specific name to the project as well as pertinent information about the personnel involved.

Project Name: _____ **Preparation Date:** _____

Controlling Agency: _____ **Modification Date:** _____

Prepared by: _____ **Control Number: (From Control Log)** _____

B. Requestor Information

Proposed Change Description and References:
The requestor will provide information concerning the requested change along with any supporting documentation.

Justification:

Impact of Not Implementing Proposed Change:

Alternatives:

C. Initial Review Results of the Change Request

Initial Review Date: **Assigned to:**

- ☐ **Approve for Impact Analysis**
- ☐ **Reject**
- ☐ **Defer Until:**

Reason:

D. Initial Impact Analysis

Baselines Affected:

Configuration Items Affected:

Cost / Schedule Impact Analysis Required? **Yes** ☐ **No** ☐

Impact on Cost:

Impact on Schedule:

Impact on Resources:

Final Review Results:

Review Date:

Classification: ☐ **HIGH** ☐ **MEDIUM** ☐ **LOW**

E. Impact Analysis Results

Specific Requirements Definition:

Additional Resource Requirements	Work Days	Cost
TOTAL		

Impact of Not Implementing the Change:

Alternatives to the Proposed Change:

Final Recommendation:

F. Signatures

Reviewing Body.

Name/Title	Signature	Date

Michigan Department of Information Technology

Post Implementation Evaluation Report

A. General Information

Information to be provided in this section is general in nature and provides the necessary information about the organization of the project and project participants.

Project Name:		**Preparation Date:**	
Controlling Agency:		**Modification Date:**	
Prepared by:		**Authorized by:**	

B. Staffing and Skills

Describe how the staffing and skill needs for this project were determined and managed. Describe the changes to these needs during the project.

C. Customer Expectations Management

Describe how customer expectations were managed. Were expectations clear from the beginning? How were expectations different than expected?

D. Lessons Learned

Describe the successes and shortcomings of the project.

E. Project Sign-Off

Delineates that the functional areas of the project team have taken all the steps to provide deliverables and that project activities are closed out.

Name/Title	Signature	Date

Project Scheduling Guidelines

This high-level guidance document is designed to help the project manager develop a well thought through and fairly accurate project schedule. The information contained in this document was derived from a combination of the State of Michigan Project Management Methodology; WBS and Scheduling Guidelines from Gantthead.com; and other related sources.

A normal functioning Project Schedule contains several key components. These components include **tasks** (derived from the work breakdown structure or WBS), **dependency relationships** between tasks, **task duration** and/or **task effort** (normally represented in person hours), and **assigned resources** (normally personnel) at the task level.

A good project schedule has detail sufficient for control by the project manager. It should not require excessive effort to maintain, especially on small, short time frame projects. A good schedule:

- Is a combination of actual progress and what is estimated to remain;
- Provides comparison with original commitments;
- Has task and resource detail sufficient for schedule management;
- Retains data for project evaluation;
- Is updated with status (progress) on a regular, scheduled basis; and
- Is changed to reflect changed project objectives, after stakeholder concurrence.

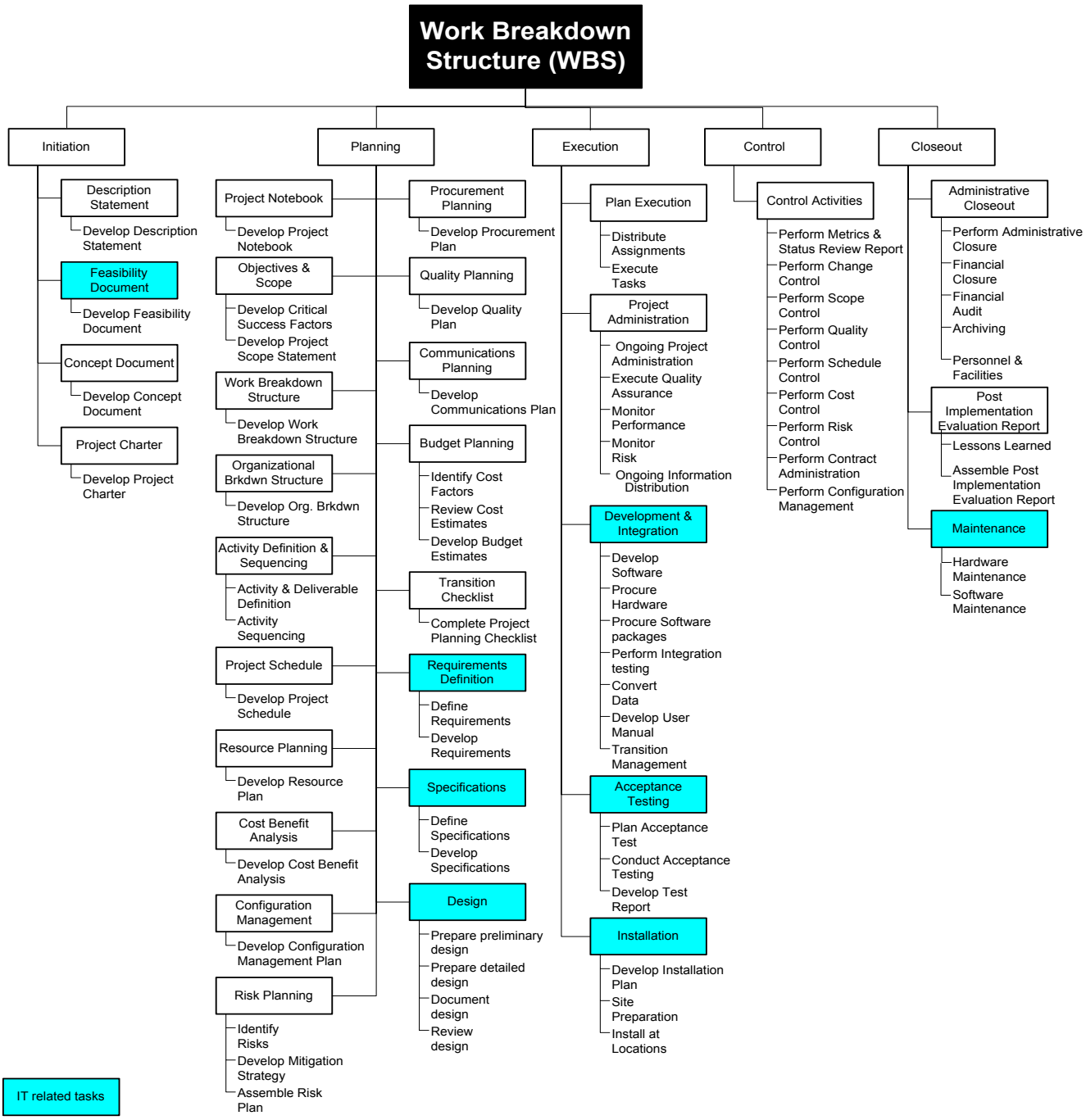
Viewing a project as one single piece of activity is like looking at the process of getting ready for work each morning in one step. Just like getting ready for work, we complete a project in smaller chunks of activities – and that's where the Work Breakdown Structure (WBS) comes in. A WBS provides a consistent and visible framework to complete any project in an organized manner. Questions to be asked include: "How many tasks should a project have?" and "How much detail should be covered by the WBS?" The following guidelines will help with this activity.

The objective of developing a WBS is to organize and comprehend a project by breaking it into progressively smaller pieces until it is a collection of meaningful and manageable tasks (or work packages).

Break the project down into major components

- Structure the project and determine activity categories:
  - Look at whatever information you have about the project that you are planning.
  - Gather information from prior projects and from other project managers.
  - Identify or define the project goals, objectives and scope.
- WBS standards and approach:
  - Use a standard WBS format or group of formats across all projects (using the attached PM Framework template) and communicate task meanings/definitions. This saves re-learning project lessons and can lay the groundwork for successful data gathering to aid future time/cost estimates.

– A sample format is given below:



- A WBS for a project will have multiple levels of detail:
  - Break down major activities into tasks and sub-tasks required to accomplish the activity.
  - Depending on the complexity of the task, these steps or subtasks can be further broken down.
  - The number of levels depends upon the size and complexity of the project.
  - The process of defining steps should continue until you are certain nothing major has been forgotten and accurate cost/hour estimates can be applied to the lowest level or activity.
  - The lowest WBS element or task should be linked to a well defined deliverable.
- Major components can be grouped by:
  - Product or service deliverables

  - Project/system phases
  - Organizational responsibilities
  - Time phases
- The number of levels of detail depends on:
  - Size of project – smaller projects generally have fewer levels
  - Risk/complexity – more risk would have more levels
  - Similarity with past projects – more similarity means fewer levels
- Each lowest level element of the WBS (task) should be:
  - Manageable
    - Specific authority and responsibility assigned to each element
    - Only one owner should be assigned to each task
  - Independent
    - Minimum interfacing with and dependence on other tasks
    - Clearly defined deliverables are evident
    - Quality can be assured through performance criteria associated with each deliverable
  - Measurable
    - Results measured in terms of progress by completion of tasks
    - The work can be readily tracked and monitored
    - Each task is small enough so that estimates are credible

Specify deliverables for each task

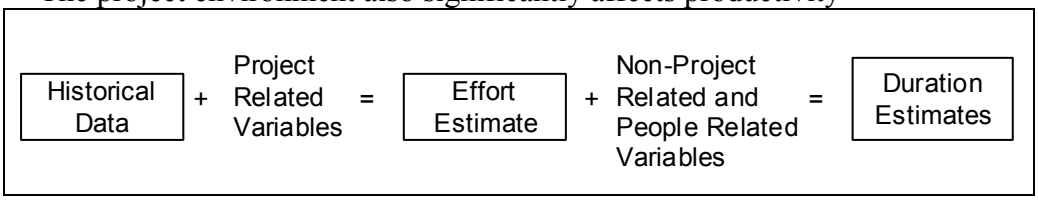
- Identify deliverables and milestones for each major task
  - Tasks need to have clearly and concisely defined deliverables
- Establish performance standards upon which the deliverable will be measured is desirable
  - Deliverables must be clearly measurable

After developing the work breakdown structure and identifying the lowest level tasks, the next step is to do the scheduling for the project. The activities involved are estimating the duration of all tasks identified in the WBS and determining the logical dependencies amongst the tasks and creating a time line for the tasks.

Estimate the duration and effort for each lowest level task

- Collect historical data from other projects. Consider following (for a software development project):
  - Project Metric Databases
  - Measurement of software size – lines of codes, functions points
  - Complexity of code
  - Post-Mortems, project reviews
  - Analyze people experience--task owners' project managers
- Estimating Tools & Techniques
  - Use standard tools where applicable
  - Standard procedures
  - Collect and maintain historical data; do trend analysis for estimation and effort utilization
- Deal with uncertainties
  - Reduce unknowns by:
    - Thoroughly defining the project and tasks
    - Breaking the work down to the lowest level of detail
    - Identifying and understanding dependencies--both amongst tasks and external dependencies
  - Lack of detail in requirements may indicate requirements are not firm, which would increase uncertainties
  - Add contingency factor to estimates proportional to the level of uncertainty

- Consider Project Related Variables
  - Time and resource requirements increase in a non-linear fashion with the increasing project complexity
  - Levels of reliability and performance levels affect the time/testing needed- greater reliability and higher the performance levels sought increase the time needed
  - Standards procedures and tools for project tasks help improve productivity
  - The project environment also significantly affects productivity



Determine logical dependencies for each lowest level task

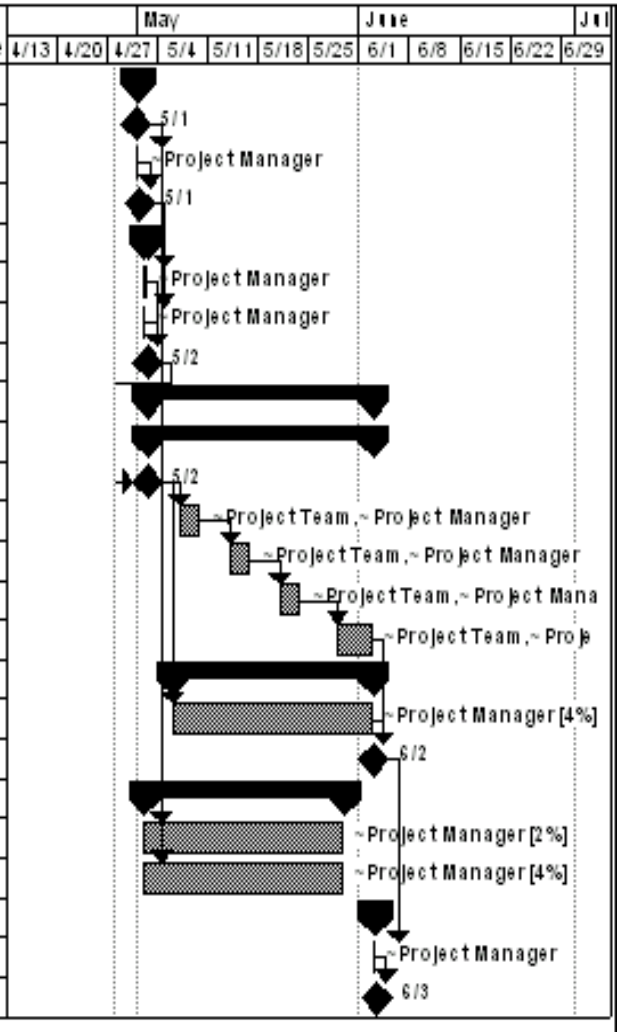
- Each task must precede another task(s) unless it is completing the project
- Consider all predecessor tasks (those tasks occurring before and tied to the referenced task) and successor tasks (tasks occurring after and tied to the referenced task) and the flow of variables and information between them
- To determine logical dependencies consider:
  - Input and output from both the internal and external sources
  - Files, data storage and data records touched and update by various tasks
  - Processing to massage and update data; consider sequence of tasks working on files/data-records
- Check all dependencies for loops
- Develop all paths
  - Sequential series of tasks linked by logical dependencies
  - Identify milestones for the tasks and paths
  - Identify deliverables associated with milestones

Develop timeline for tasks – critical path method

- Determine critical path using the scheduling software (Niku Workbench or MS Project)
  - Defined as the longest continuous path(s) going from the start to the end of the project
  - The critical path determines the length of the project
- Identify critical tasks
  - Tasks that must be done on schedule otherwise the project would be delayed
  - All tasks of critical path are critical
- Identify non-critical tasks
  - The tasks that have some leeway between their earliest possible start and their latest allowable start
  - Determine the float – the length of time a task (on a non-critical path) could be delayed without affecting project completion date
- Establish milestones and associate deliverables with them

Scheduling Template in MS Project Format

ID	Task Name	Duration	Start	Finish	Work	Predecessors
1	Initiation	0.38 days	Thu 5/1/03	Thu 5/1/03	3 hrs	
2	Project Begins	0 days	Thu 5/1/03	Thu 5/1/03	0 hrs	
3	Develop Project Charter	0.38 days	Thu 5/1/03	Thu 5/1/03	3 hrs	2
4	Project Charter Approved	0 days	Thu 5/1/03	Thu 5/1/03	0 hrs	3
5	Planning	0.5 days	Fri 5/2/03	Fri 5/2/03	6 hrs	
6	Develop Project Plan	0.5 days	Fri 5/2/03	Fri 5/2/03	4 hrs	4
7	Develop Project Schedule	0.25 days	Fri 5/2/03	Fri 5/2/03	2 hrs	4
8	Project Plan Approved	0 days	Fri 5/2/03	Fri 5/2/03	0 hrs	6,7
9	Execution	21.5 days	Fri 5/2/03	Mon 6/2/03	198 hrs	
10	Project Plan Execution	21.5 days	Fri 5/2/03	Mon 6/2/03	192 hrs	
11	Execution Begins	0 days	Fri 5/2/03	Fri 5/2/03	0 hrs	8
12	Perform Execution Task1	3 days	Wed 5/7/03	Fri 5/9/03	48 hrs	11
13	Perform Execution Task2	3 days	Wed 5/14/03	Fri 5/16/03	48 hrs	12
14	Perform Execution Task3	3 days	Wed 5/21/03	Fri 5/23/03	48 hrs	13
15	Perform Execution Task N...	3 days	Thu 5/29/03	Mon 6/2/03	48 hrs	14
16	Project Schedule Maintenance	20 days	Tue 5/6/03	Mon 6/2/03	6 hrs	
17	Update Project Schedule	20 days	Tue 5/6/03	Mon 6/2/03	6 hrs	11
18	Project Deliverables Completed	0 days	Mon 6/2/03	Mon 6/2/03	0 hrs	15,17
19	Control	20 days	Fri 5/2/03	Thu 5/29/03	9 hrs	
20	Complete Project Status Reports	20 days	Fri 5/2/03	Thu 5/29/03	3 hrs	2
21	Prepare and Facilitate Status Meetings	20 days	Fri 5/2/03	Thu 5/29/03	6 hrs	2
22	Closeout	0.25 days	Tue 6/3/03	Tue 6/3/03	2 hrs	
23	Prepare PIer Document	0.25 days	Tue 6/3/03	Tue 6/3/03	2 hrs	18
24	Project Signoff	0 days	Tue 6/3/03	Tue 6/3/03	0 hrs	23



Scheduling Template in Niku Workbench Format

Type	Name	Start	Finish	Name	% Co	ETC (Remai	Actual	Duration
Ph	**Initiation**	**5/1/2003**	**5/1/2003**		**0%**			**1**
Milest	Project Begins	5/1/2003	5/1/2003		0%			0
Task	Develop Project Charter	5/1/2003	5/1/2003	~Project Man	0%	3.00		1
Milest	Project Charter Approved	5/1/2003	5/1/2003		0%			0
Phas	**Planning**	**5/2/2003**	**5/2/2003**		**0%**			**1**
Task	Develop Project Plan	5/2/2003	5/2/2003	~Project Man	0%	4.00		1
Task	Develop Project Schedule	5/2/2003	5/2/2003	~Project Man	0%	2.00		1
Milest	Project Plan Approved	5/2/2003	5/2/2003		0%			0
Phas	**Execution**	**5/2/2003**	**6/2/2003**		**0%**			**21**
Activi	**Project Plan Execution**	**5/2/2003**	**6/2/2003**		**0%**			**21**
Milest	Execution Begins	5/2/2003	5/2/2003		0%			0
Task	Perform Execution Task1	5/5/2003	5/9/2003	~Project Tea	0%	40.00		5
				~Project Man		6.00		
Task	Perform Execution Task2	5/12/2003	5/16/2003	~Project Tea	0%	40.00		5
				~Project Man		6.00		
Task	Perform Execution Task3	5/19/2003	5/23/2003	~Project Tea	0%	40.00		5
				~Project Man		6.00		
Task	Perform Execution Task N...	5/27/2003	6/2/2003	~Project Tea	0%	40.00		5
				~Project Man		6.00		
Activi	**Project Schedule Maintenance**	**5/5/2003**	**6/2/2003**		**0%**			**21**
Task	Update Project Schedule	5/5/2003	6/2/2003	~Project Man	0%	6.00		21
Milest	Project Deliverables Completed	6/2/2003	6/2/2003		0%			0
Phas	**Control**	**5/1/2003**	**5/29/2003**		**0%**			**21**
Task	Complete Project Status Reports	5/1/2003	5/29/2003	~Project Man	0%	3.00		21
Task	Prepare and Facilitate Status Meeting	5/1/2003	5/29/2003	~Project Man	0%	6.00		21
Phas	**Closeout**	**6/3/2003**	**6/3/2003**		**0%**			**1**
Task	Prepare Pier Document	6/3/2003	6/3/2003	~Project Man	0%	2.00		1